



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, DC 20590  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09-881,823      | 02/13/2003  | Wenyuan Shi          | 22851-032           | 8987             |

29585 7590 02/13/2003

GRAY CARY WARE & FREIDENRICH LLP  
153 TOWNSEND  
SUITE 800  
SAN FRANCISCO, CA 94107

EXAMINER

ZEMAN, ROBERT A

ART UNIT PAPER NUMBER

1645

DATE MAILED: 02/13/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/881,823

Applicant(s)

SHI ET AL.

Examiner

Robert A. Zeman

Art Unit

1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-3 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the light chain of said antibody comprises the amino acid sequence of SEQ ID NO:1, classified in class 436, subclass 547.
- II. Claims 1-2, 4 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the heavy chain of said antibody comprises the amino acid sequence of SEQ ID NO:3, classified in class 436, subclass 547.
- III. Claims 1-2, 5 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the light chain of said antibody comprises the amino acid sequence of SEQ ID NO:5, classified in class 436, subclass 547.
- IV. Claims 1-2, 6 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the heavy chain of said antibody comprises the amino acid sequence of SEQ ID NO:7, classified in class 436, subclass 547.
- V. Claims 1-2, 7 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the light chain of said

Art Unit: 1645

antibody comprises the amino acid sequence of SEQ ID NO:9, classified in class 436, subclass 547.

- VI. Claims 1-2, 8 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the heavy chain of said antibody comprises the amino acid sequence of SEQ ID NO:11, classified in class 436, subclass 547.
- VII. Claims 1-2, 9 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the light chain of said antibody comprises the amino acid sequence of SEQ ID NO:2, classified in class 436, subclass 547.
- VIII. Claims 1-2, 10 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the heavy chain of said antibody comprises the amino acid sequence of SEQ ID NO:4, classified in class 436, subclass 547.
- IX. Claims 1-2, 11 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the light chain of said antibody comprises the amino acid sequence of SEQ ID NO:6, classified in class 436, subclass 547.
- X. Claims 1-2, 12 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the heavy chain of said antibody comprises the amino acid sequence of SEQ ID NO:8, classified in class 436, subclass 547.

Art Unit: 1645

- XI. Claims 1-2, 13 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the light chain of said antibody comprises the amino acid sequence of SEQ ID NO:10, classified in class 436, subclass 547.
- XII. Claims 1-2, 14 and 15-17, drawn to methods of treating dental caries comprising administering an antibody wherein the variable region of the heavy chain of said antibody comprises the amino acid sequence of SEQ ID NO:12, classified in class 436, subclass 547.
- XIII. Claim 18, drawn to methods of producing antibodies using transgenic animals, classified in class 800, subclass 6.
- XIV. Claim 19, drawn to methods of producing antibodies comprising immunizing isolated human B-lymphocytes *in vitro*, classified in class 435, subclass 332.
- XV. Claim 20, drawn to drawn to methods of producing antibodies comprising isolating human B lymphocytes from humans with an acute infection of at least one cariogenic organism, classified in class 435, subclass 325.
- XVI. Claims 21-24, drawn to method of producing antibodies utilizing recombinant techniques, classified in class 435, subclass 69.6.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-XVI are separate and distinct from each other as they are each drawn to differing methods with differing goals, utilizing differing steps and reagents and leading to differing results.

Art Unit: 1645

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A. Zeman whose telephone number is (703) 308-7991. The examiner can normally be reached on Monday- Thursday, 7am -5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith can be reached on (703) 308-3909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-4242 for After Final communications.

Art Unit: 1645

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

  
LYNETTE R. F. SMITH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600

Robert A. Zeman  
February 11, 2003